

ABSTRACT OF THE DISCLOSURE

The present invention provides compositional buffers for electronic ceramics containing volatile elements, and a method for manufacturing the same, as well as a method for manufacturing electronic ceramics using the compositional buffer. The surfaces of the fine crystal grains that make up an electronic ceramic such as a bismuth-based laminar compound or lead-based perovskite compound containing highly volatile cations such as bismuth or lead, or a thin film thereof, are covered, resulting in a compositional buffer capable of maintaining an electronic ceramic containing a volatile element or a thin film thereof at its stoichiometric composition, and this compositional buffer is composed of a silicate- or borate-based compound that readily forms an amorphous structure, and also provided is a method for manufacturing an electronic ceramic in which the above compositional buffer is used to cover the surfaces of the fine crystal grains that make up the above-mentioned electronic ceramic or thin film thereof by chemical solution method.